



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/772,129	01/29/2001	Juha Tuomo Tervo	473-010116-US(PAR)	9569

7590 04/26/2005

Clarence A. Green
PERMAN & GREEN, LLP
425 Post Road
Fairfield, CT 06430

EXAMINER

PEREZ GUTIERREZ, RAFAEL

ART UNIT PAPER NUMBER

2686

DATE MAILED: 04/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/772,129

Applicant(s)

Tervo et al.

Examiner

Rafael Perez-Gutierrez

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 January 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 2686

DETAILED ACTION

1. Applicant's request for reconsideration of the finality of the rejection of the last Office Action filed on December 9, 2004 is persuasive and, therefore, the finality of that Action is withdrawn. **Claims 2-18** are still pending in the present application. **This Action is made NON-FINAL.**

Drawings

2. New formal drawings are required in this application. See the attached Notice of Draftsperson's Patent Drawing Review for appropriate corrections.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference number mentioned in the description on **page 6 line 28**: Reference number **14** identifying the motor vehicle is not shown in **figure 2**.

4. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office Action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended". If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must

Art Unit: 2686

be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the Examiner, the Applicant will be notified and informed of any required corrective action in the next Office Action. If a response to the present Office Action fails to include proper drawing corrections, corrected drawings or arguments therefor, the response can be held **NON-RESPONSIVE** and/or the application could be **ABANDONED** since the objections/corrections to the drawings are no longer held in abeyance.

Specification

5. The disclosure is objected to because of the following informalities:
 - a) On **page 10 line 31**, replace "12.45 pm" with --12:45 pm--;
 - b) On **page 10 line 36**, replace "12.50 pm" with --12:50 pm--; and
 - c) On the **abstract**, delete "(Fig. 4)".

Appropriate correction is required.

Claim Objections

Art Unit: 2686

6. **Claims 2, 5, 7, 9, 10, 13, 14, 17, and 18** are objected to because of the following informalities:

a) On **line 2 of claim 2**, replace “the” with --a-- after “that” in order to provide proper antecedent basis to “code number”;

b) On **line 3 of claim 5**, insert --a-- before “respective”;

c) On **line 2 of claim 7**, replace “store” with --stored-- after “the”;

d) On **line 2 of claims 9 and 10**, delete “the” after “and/or” in order to provide proper antecedent basis to “times”;

e) On **line 3 of claims 9 and 10**, delete “the” before “reception” in order to provide proper antecedent basis to “reception field strengths”;

f) On **line 7 of claim 13**, on **line 6 of claim 14**, on **lines 7, 10, and 13 of claim 17**, and on **lines 7 and 11 of claim 18**, replace “(Z; X, Y)” with --(Z, X, Y)-- after “information”;

g) On **line 12 of claim 17**, replace “are” with --is-- after “(15)”; and

h) On **lines 10 and 12 of claim 18**, replace “are” with --is-- after “data”.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the Applicant regards as his invention.

Claims 2-12, 17, and 18 are rejected under 35 U.S.C. 112, second paragraph, as being

Art Unit: 2686

indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Consider **claim 6**, the limitation of “if appropriate” in **line 4** renders claim 6 indefinite since it is not clear from the claim when making use of a reception field strength is or is not appropriate.

Consider **claim 7**, the limitation of “if appropriate” in **lines 2 and 3** renders claim 7 indefinite since it is not clear from the claim when using a reception field strength is or is not appropriate.

For purposes of applying prior art, the Examiner is considering the limitation of using a reception field strength to be appropriate at all times (i.e., it will always be transmitted in claim 6 and used in claim 7).

Consider **claim 9**, the limitation of “location information ... **stored separately from the mobile station (15)** in a memory (31) ” in **lines 2 and 4** renders claim 9 indefinite since claim 9 depends on claim 17 and **claim 17 lines 8 and 9** already recite that the “location information ... **is stored in a memory (17) of the mobile station (15)**”. It is not clearly understood how the location information can be **stored separately from** the mobile station if it has been already **stored at** the mobile station.

Consider **claim 11**, the limitation of “when necessary” in **line 4** renders claim 11 indefinite since it is not clear from the claim when the transmission is or is not necessary.

For purposes of applying prior art, the Examiner is considering the limitation of the transmission to be necessary at all times (i.e., the location, times, reception field strength, and/or

Art Unit: 2686

movement data will always be transmitted).

Consider **claim 17**, the limitation of “when necessary” in **line 11** renders claim 17 indefinite since it is not clear from the claim when the transmission of the sequence of location information is or is not necessary.

Claims 2-12 are similarly rejected by virtue of their dependency in claim 17.

Consider **claim 18**, the limitation of “when necessary” in **line 11** renders claim 18 indefinite since it is not clear from the claim when the determination of the movement data is or is not necessary.

For purposes of applying prior art, the Examiner is considering the limitation of the determination of the movement data to be necessary at all times (i.e., the movement data will always be determined).

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office Action:

A person shall be entitled to a patent unless -- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 2 and 9-17 are rejected under 35 U.S.C. 102(e) as being anticipated by **Hamada et al. (U.S. Patent # 6,314,296 B1)**.

Art Unit: 2686

Consider **claim 13**, Hamada et al. clearly show and disclose a wireless telecommunications system (mobile radio network) having a plurality of base stations 1204, 1205, 1206, 1207 (figures 12 and 18) for supplying at least one wireless communications terminal 1203 (mobile station) (figures 12, 13, 18, and 19), and having an information processing terminal 1802 (central station) (figure 18) which is designed in such a way that, for a plurality of base stations 1204, 1205, 1206, 1207 which successively supply the wireless communications terminal 1203 (mobile station) as it moves (figures 12, 16, and 18, and column 11 lines 14-25, 37-44, and 54-60), said information processing terminal 1802 (central station) (figure 18) stores at least the position (location) information associated with the base stations 1204, 1205, 1206, 1207 and determines a route (movement data) of the wireless communications terminal 1203 (mobile station) from a sequence of stored location information (column 13 line 41-62 and column 14 lines 39-54).

Consider **claim 14**, Hamada et al. clearly show and disclose a wireless communications terminal 1203 (mobile station) (figures 12, 13, 18, and 19) for a wireless telecommunications system (mobile radio network) having a plurality of base stations 1204, 1205, 1206, 1207 (figures 12 and 18), which wireless communications terminal 1203 (mobile station) is designed in such a way that, for a plurality of base stations 1204, 1205, 1206, 1207 which successively supply the wireless communications terminal 1203 (mobile station) as it moves (figures 12, 16, and 18, and column 11 lines 14-25, 37-44, and 54-60), said wireless communications terminal 1203 (mobile station) stores, as a sequence, at least the position (location) information associated with the base stations 1204, 1205, 1206, 1207 (figures 12-14, 16, and 18, column 11 lines 37-44

Art Unit: 2686

and 54-60, and column 12 lines 1-63).

Consider **claim 15**, and **as applied to claim 14 above**, Hamada et al. further disclose that the wireless communications terminal 1203 (mobile station) includes a high frequency unit 1301, 1901 (switching device) (figures 13 and 19) for transmitting the stored sequence of location information to an information processing terminal 1802 (central station) (figure 18 and column 14 lines 1-18 and 39-45).

Consider **claim 16**, and **as applied to claim 14 above**, Hamada et al. further disclose that the wireless communications terminal 1203 (mobile station) includes a controller 1305 (figure 13) which determines a route (movement data) of the wireless communications terminal 1203 (mobile station) from the stored sequence of location information (column 11 lines 37-44 and column 12 line 55 - column 13 line 15).

Consider **claim 17**, Hamada et al. clearly show and disclose a method for requesting information (e.g., route and fare information) (figure 20) by means of a wireless communications terminal 1203 (mobile station) (figures 12, 13, 18, and 19) which is associated with a wireless telecommunications system (mobile radio network) (figures 12 and 18 and column 14 lines 39-60) and in which

for a plurality of base stations 1204, 1205, 1206, 1207 (figures 12 and 18) which are associated with the wireless telecommunications system (mobile radio network) and which successively supply the wireless communications terminal 1203 (mobile station) at it moves, at least the location information which is associated with the base stations 1204, 1205, 1206, 1207 is stored in a memory 1306, 1906 (figures 13 and 19) of the wireless communications terminal

Art Unit: 2686

1203 (mobile station) (figure 14, column 11 lines 37-44 and 54-60, column 12 lines 55-63, and column 14 lines 10-18);

a sequence of location information stored is transmitted to an information processing terminal 1802 (central station) (figures 18 and 20 and column 14 lines 10-18 and 39-45);

a route (movement data) of the wireless communications terminal 1203 (mobile station) is determined from the location information transmitted (figure 20 and column 14 lines 46-52); and

information (e.g., route traveled and the fare due) which is dependent on the route (movement data) determined is transmitted to the wireless communications terminal 1203 (mobile station) (figure 20 and column 14 lines 52-60).

Consider **claim 2**, and **as applied to claim 17 above**, Hamada et al. further show and disclose that a base station ID (CS-ID) (code number of a radio cell) which is associated with a respective base station 1204, 1205, 1206, 1207 is stored as location information (figure 14 and column 11 lines 54-60).

Consider **claim 9**, and **as applied to claim 17 above**, Hamada et al. also show and disclose that the location information and/or the route (movement data) can be stored separately from the wireless communications terminal 1203 (mobile station) in a database 1803 (memory) (figure 18, column 13 lines 40-62, and column 14 lines 39-54).

Consider **claims 10 and 11**, and **as applied to claim 17 above**, Hamada et al. further show and disclose that the location information and/or the route (movement data) can be stored in a memory 1306 of the wireless communications terminal 1203 (mobile station) (figures 13 and

Art Unit: 2686

14, column 11 lines 37-44 and 54-60, column 13 lines 5-15, and column 14 lines 55-60) and that the location information can be transmitted to an information processing terminal 1802 (service provider) (figures 18 and 20 and column 14 lines 10-18 and 39-45).

Consider **claim 12**, and as applied to **claim 9** above, Hamada et al. further show and disclose that information (e.g., route traveled and the fare due) which is dependent on the route (movement data) determined is transmitted to the wireless communications terminal 1203 (mobile station) (figure 20 and column 14 lines 52-60).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the Examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the Examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2686

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. **Claims 3, 4, and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hamada et al. (U.S. Patent # 6,314,296 B1)** in view of **Booth (WO 98/54682)**.

Consider **claims 3 and 4**, and as applied to **claim 17 above**, Hamada et al. clearly show and disclose the claimed invention except that the geographic coordinates of a respective base station 1204, 1205, 1206, 1207 are stored as location information (claim 3) and that the time at which the wireless communications terminal 1203 (mobile station) is supplied from a respective base station 1204, 1205, 1206, 1207 among the base stations 1204, 1205, 1206, 1207 is stored

Art Unit: 2686

(claim 4).

In the same field of endeavor, Booth clearly shows and discloses a method for requesting information, dependent of movement data of a mobile station, by means of said mobile station in which the geographic coordinates (X, Y) of a respective cell site (base station) is stored as location information (page 37 lines 10-16 and page 51 table 52) (reads on claim 3) and the time at which said mobile station is supplied from a respective cell site (base station) from among the cell sites (base stations) is stored (page 15 lines 13-22) (reads on claim 4).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to store the geographic coordinates and the time at which the mobile station is supplied from a respective base station as taught by Booth in the method disclosed by Hamada et al. for the purpose of enhancing the determination of movement data by incorporating additional information in the determination.

Consider **claim 8**, and **as applied to claim 4 above**, Hamada et al., as modified by Booth, clearly show and disclose the claimed invention except that a velocity of the wireless communications terminal 1203 (mobile station) is determined as the route (movement data) from the stored sequence of location information and the times at which the wireless communications terminal 1203 (mobile station) is supplied from a respective base station 1204, 1205, 1206, 1207.

In the same field of endeavor, Booth clearly shows and discloses a method for requesting information, dependent of movement data of a mobile station, by means of said mobile station in which the velocity of the mobile station is determined as movement data from location information and the times at which said mobile station is supplied from a respective cell site

Art Unit: 2686

(base station) (figures 14-18, page 14 lines 4-7, page 22 lines 9-18, and pages 47-51 tables 4-10, 14, and 15).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to determine the velocity of the mobile station as the movement data as taught by Booth in the method disclosed by Hamada et al. for the purpose of tracking vehicles.

11. **Claims 5 and 6** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hamada et al. (U.S. Patent # 6,314,296 B1)** in view of **Shibuya (U.S. Patent # 5,666,662)**.

Consider **claims 5 and 6**, and as applied to **claim 17** above, Hamada et al. clearly show and disclose the claimed invention except that a reception field strength of a signal transmitted between the wireless communications terminal 1203 (mobile station) and a respective base station 1204, 1205, 1206, 1207 is stored (claim 5) and that a direction of movement of the wireless communications terminal 1203 (mobile station) is determined as a route (movement data) from the stored sequence of location information and the use of the reception field strength of a signal transmitted between the wireless communications terminal 1203 (mobile station) and base station 1204, 1205, 1206, 1207 (claim 6).

In the same field of endeavor, Shibuya clearly shows and discloses a method for determining a direction of movement of a portable telephone set 1 (mobile station) (figure 1) comprising storing a reception field strength of a signal transmitted between the portable telephone set 1 (mobile station) and a respective base station B1-B3 (figure 1) (inherently required in order to perform the disclosed calculations) and determining a direction of movement

Art Unit: 2686

of the portable telephone set 1 (mobile station) as movement data from a stored sequence of location information and by using the reception field strength of a signal transmitted between the portable telephone set 1 (mobile station) and base station B1-B3 (figure 1, column 1 lines 53-67 column 2 lines 6-9, column 3 lines 6-20, and column 4 lines 42-61).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to store the reception field strength and use it in conjunction with the stored sequence of location information to determine movement data as taught by Shibuya in the method disclosed by Hamada et al. for the purpose of enhancing the determination of movement data by incorporating additional information in the determination.

12. **Claim 7** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Hamada et al.** (U.S. Patent # 6,314,296 B1) in view of **Shibuya** (U.S. Patent # 5,666,662), as applied to **claim 6 above**, and further in view of **Booth** (WO 98/54682).

Consider **claim 7**, and as applied to **claim 6 above**, Hamada et al., as modified by Shibuya, clearly show and disclose the claimed invention except determining coordinates of a road as constituting movement data.

In the same field of endeavor, Booth clearly shows and discloses a method for requesting information, dependent of movement data of a mobile station, by means of said mobile station in which location information, among other information, is used for determining coordinates of a road as constituting the movement data (figures 8 and 14-17 and pages 46-49 tables 4-9).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time

Art Unit: 2686

the invention was made to determine coordinates of a road as the movement data as taught by Booth in the method disclosed by Hamada et al., as modified by Shibuya, for the purpose of tracking vehicles.

13. **Claim 18** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Hamada et al. (U.S. Patent # 6,314,296 B1)**.

Consider **claim 18**, Hamada et al. clearly show and disclose a method for requesting information (e.g., route and fare information) (figure 20) by means of a wireless communications terminal 1203 (mobile station) (figures 12, 13, 18, and 19) which is associated with a wireless telecommunications system (mobile radio network) (figures 12 and 18 and column 14 lines 39-60) and in which

for a plurality of base stations 1204, 1205, 1206, 1207 (figures 12 and 18) which are associated with the wireless telecommunications system (mobile radio network) and which successively supply the wireless communications terminal 1203 (mobile station) at it moves, at least the location information which is associated with the base stations 1204, 1205, 1206, 1207 is stored in a memory 1306, 1906 (figures 13 and 19) of the wireless communications terminal 1203 (mobile station) (figure 14, column 11 lines 37-44 and 54-60, column 12 lines 55-63, and column 14 lines 10-18); and

a route (movement data) is determined from a sequence of location information stored (figure 17 and column 13 lines 5-15).

However, Hamada et al. do not specifically disclose transmitting the route (movement

Art Unit: 2686

data) to a central station and information which is dependent on the route (movement data) transmitted is transmitted to the wireless communications terminal 1203 (mobile station).

Nonetheless, Hamada et al. do disclose, in another embodiment, transmitting the location information to an information processing terminal 1802 (central station) (figures 18 and 20 and column 14 lines 10-18 and 39-45) and information (e.g., a fare due) which is dependent on the location information transmitted is transmitted to the wireless communications terminal 1203 (mobile station) (figure 20 and column 14 lines 52-60).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Hamada et al. in order to transmit the route (movement data) to the information processing terminal 1802 (central station) and receive information (e.g., fare due) dependent thereof for the purpose of further distributing the processing of the request for information.

Response to Arguments

14. Applicant's arguments with respect to **claims 13, 14, 17, and 18** have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

15. Any response to this Office Action should be **faxed to (703) 872-9306 or mailed to:**

Art Unit: 2686

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

16. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Rafael Perez-Gutierrez whose telephone number is (571) 272-7915. The Examiner can normally be reached on Monday-Thursday from 6:30am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Marsha D. Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding

Art Unit: 2686

should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.


Rafael Perez-Gutierrez
R.P.G./rpg **RAFAEL PEREZ-GUTIERREZ**
PATENT EXAMINER

April 20, 2005